

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-24 (Canceled).

25. (New) A microfluidic system, comprising:

a) at least one carrier flow channel for supplying a carrier flow with particles suspended therein,

b) a plurality of outlet conduits,

c) a branching area in which the carrier flow channel branches into the outlet conduits,

d) a first manipulation apparatus arranged in the carrier flow channel for the manipulation of the particles suspended in the carrier flow, the first manipulation apparatus being a field cage that fixes the particles, and

e) a second manipulation apparatus arranged in the carrier flow channel for the manipulation of the particles suspended in the carrier flow, the second manipulation apparatus being a particle gate that sorts the particles suspended in the carrier flow into one of the outlet conduits,

wherein the first manipulation apparatus and the second manipulation apparatus have a common electrode arrangement and the common electrode arrangement is arranged in the branching area.

26. (New) The microfluidic system according to Claim 25, wherein the common electrode arrangement additionally forms a third manipulation apparatus.

27. (New) The microfluidic system according to Claim 25, wherein the common electrode arrangement has at least one electrode that is a component of the first manipulation apparatus as well as a component of the second manipulation apparatus.

28. (New) The microfluidic system according to Claim 26, wherein the third manipulation apparatus is a centering apparatus that centers the particles in the carrier flow channel.

29. (New) The microfluidic system according to Claim 25, wherein the electrode arrangement includes at least one arrow-shaped electrode and a plurality of deflection electrodes,

the at least one arrow-shaped electrode is aligned in opposite direction to a direction of flow of the carrier flow, and

the deflection electrodes are arranged upstream before the at least one arrow-shaped electrode and border on the at least one arrow-shaped electrode.

30. (New) The microfluidic system according to Claim 25, wherein the electrodes of the electrode arrangement can be separately actuated, and the electrode arrangement has a number of electrodes selected from the group consisting of four, six or eight electrodes.

31. (New) The microfluidic system according to Claim 25, wherein the field cage comprises eight electrodes and the centering unit comprises four electrodes, provided that four electrodes of the field cage are located upstream of and electrically connected to one of the four electrodes of the centering unit.

32. (New) The microfluidic system according to Claim 25, wherein a first measuring station in which the particles suspended in the carrier flow are analyzed in the flowing state upstream from the common electrode arrangement.

33. (New) The microfluidic system according to Claim 25, wherein a second measuring station that analyzes the particles fixed in the field cage.

34. (New) The microfluidic system according to Claim 25, wherein an actuation unit for actuating the common electrode arrangement, the actuation unit being connected on the input side to the first measuring station and/or to the second measuring station and actuates the common electrode arrangement as a function of the analysis in the first measuring station and/or in the second measuring station.

35. (New) A particle sorter with a microfluidic system according to Claim 25.

36. (New) An actuation method for an electrode arrangement arranged in a carrier flow channel of a microfluidic system, wherein in the carrier flow channel a carrier flow with suspended particles flows, said method comprising the following steps:

a) electrical actuation of the electrode arrangement so that the particles suspended in the carrier flow are subjected by the electrode arrangement to a first manipulation, the first manipulation comprising a fixation of the suspended particles, and

b) selective actuation of the electrode arrangement for carrying out the first manipulation on the particles or for carrying out a second manipulation on the particles,

wherein the second manipulation comprises a sorting of the suspended particles and the common electrode arrangement is arranged in a branching area in which the carrier flow channel branches into outlet conduits.

37. (New) The actuation method according to Claim 36, wherein the particles suspended in the carrier flow are analyzed.

38. (New) The actuation method according to Claim 37, wherein the electrode arrangement is actuated as a function of an analysis of the particles for carrying out the first manipulation and/or the second manipulation.

39. (New) A method for analyzing particles, said method comprising the use of a microfluidic system according to Claim 25.

40. (New) A method for sorting particles, said method comprising the use of a microfluidic system according to Claim 25.